

WHAT IS CLAIMED IS:

1 1. An apparatus for controlling a program information display on an electronic program guide
2 (EPG) screen, comprising:

3 a demultiplexer demultiplexing a received transport stream, and extracting service description
4 table (SDT) information and event information table (EIT) information from the demultiplexed data;

5 a program information length detector detecting length of the program information from the
6 service description table (SDT) information and the event information table (EIT) information
7 extracted from the demultiplexer; and

8 a display controller processing the program information to be displayed on an electronic
9 program guide (EPG) by corresponding to the length of the program information detected from the
10 program information length detector, and transmitting the program information to a video display
11 device.

1 2. The apparatus of claim 1, wherein the program information length detector searches a
2 service ID of a current transport stream by using PID (0x11) and SDT Actual table ID (0x42) of the
3 inputted service description table (SDT) information, analyzes a service_descriptor in a selected
4 service with the searched service ID, and extracts length of a service name.

1 3. The apparatus of claim 1, wherein the program information length detector comprises:
2 an service description table (SDT) input unit inputting the service description table (SDT) information
3 transmitted from the demultiplexer;

4 a service ID searcher searching a service ID of a current transport stream by using the PID
5 (0x11) and SDT Actual table ID (0x42) of the service description table (SDT) information inputted
6 through the service description table (SDT) input unit;

7 a table parsing unit parsing a table of a selected service with the service ID searched in the
8 service ID searcher, and extracting a service descriptor; and

9 a service name length extractor analyzing the service descriptor extracted from the table
10 parsing unit, and extracting length of the service name.

1 4. The apparatus of claim 1, wherein the program information length detector extracts
2 short_event_descriptor (0x4D) of a corresponding event with PID (0x12) and Table ID (0x4E, 0x50
3 ~ 0x5F) of EIT present and following actual or EIT schedule actual of the inputted EIT information,
4 and extracting length of an event name by analyzing the extracted short_event_descriptor.

1 5. The apparatus of claim 1, wherein the program information length detector comprises:
2 an EIT input unit inputting the event information table (EIT) information transmitted from the
3 demultiplexer;

4 a service ID searcher searching an event ID in the event information table (EIT) information
5 inputted through the EIT input unit;

6 a table parsing unit parsing event information table (EIT) like the PID (0x12) and the Table
7 ID (0x4E, 0x50 ~ 0x5F) of EIT present and following actual or EIT schedule actual with the event
8 ID searched in the service ID searcher, and extracting the short_event_descriptor (0x4D) of the
9 corresponding event; and

an event name length extractor analyzing the short_event_descriptor (0x4D) extracted from the table parsing unit, and extracting length of an event name.

6. A method for controlling a program information display on an electronic program guide screen, the method comprising:

a first step of demultiplexing a received transport stream, extracting service description table (SDT) information and event information table (EIT) information from the demultiplexed data, and detecting length of program information from the extracted SDT information and the EIT information;

a second step of confirming whether it is possible to display the length of the detected program information in a restricted region, when the program information is requested to be displayed within a table cell; and

a third step of dividing the program information into displayable length units, if the length of the detected program information cannot be displayed in the restricted region after confirming, and displaying the divided program information.

7. The method of claim 6, wherein the third step comprises the sub-steps of:

dividing the program information into the displayable length units, if the length of the detected program information cannot be displayed in the restricted region;

displaying program information stored in a first display unit buffer of the program information;

checking whether displaying of a final unit of the divided program information is completed,

and displaying program information stored in a next display unit buffer, if not completed after a checked result; and

completing the program information display after displaying the divided program information to the end after the checked result.

8. The method of claim 6, wherein in the second step, a fourth step of displaying all the detected program information in the restricted region, if the length of the detected program information can be displayed on the region, is further comprised.

9. A method for controlling a program information display on an electronic program guide screen, the method comprising:

a first step of demultiplexing a received transport stream, extracting service description table (SDT) information and event information table (EIT) information from the demultiplexed data, and detecting length of program information from the extracted SDT information and the EIT information;

a second step of confirming whether it is possible to display the length of the detected program information in a restricted region, when the program information is requested to be displayed within a table cell;

a third step of creating a display range window of displayable length, if the length of the detected program information cannot be displayed in the restricted region after a confirmed result in the second step; and

a fourth step of displaying the program information as moving the display range window

created in the third step.

10. The method of claim 9, wherein the fourth step comprises the sub-steps of:
displaying a part to be shown with the display range window from a first position of the table cell;
checking whether the display range window displays all the program information to the end, and completing a display operation if all the program information is displayed; and
displaying the program information by moving a program information display window at regular intervals, if program information to be displayed still remains after a checked result.

11. The method of claim 9, wherein the display range window displays the program information as much as corresponding size of the table cell from the start of event or service information.

12. The method of claim 9, wherein the second step comprises displaying all the detected program information in the restricted region, if the length of the detected program information can be displayed on the region.